

AMENDMENTS TO THE CLAIMS

Please add new claims 38-40 as set forth below. Following is a complete listing of the claims pending in the application:

1. (Previously Presented) A method performed by a distributed document object model system for associating business logic, comprising:

receiving a first registration request from a first business logic event handler for a first event of the distributed document object model system, wherein:

the first business logic event handler is registered for a hierarchical document of the distributed document object model system,

the first business logic event handler is responsive to an occurrence of the first event of the distributed document object model system, and

the first event occurs in response to a first modification made or requested to be made to the hierarchical document;

receiving a second registration request from a second business logic event handler for a second event of the distributed document object model system, wherein:

the second business logic event handler is registered for the hierarchical document of the distributed document object model system, wherein the second business logic event handler is different from the first business logic event handler;

the second business logic event handler is responsive to an occurrence of the second event of the distributed document object model system,

the second event is different from the first event, and

the second event occurs in response to a second modification made or requested to be made to the hierarchical document;

registering the first business logic event handler for the first event of the distributed document object model system;

registering the second business logic handler for the second event of the distributed document object model system;
monitoring for an occurrence of at least one of the first and second events;
detecting an occurrence of the first event; and
in response to the occurrence of the first event:
notifying the first business logic event handler;
receiving a first indication from the first business logic event handler; and
performing a first function relating to the received first indication, wherein the performed first function applies a first business rule that causes a third modification to the first hierarchical document, wherein the third modification is different from the first and second modifications.

2. (Canceled)

3. (Previously Presented) The method of claim 1 wherein the first business logic event handler is registered for a first document type and the second business logic event handler is registered for a second document type.

4. (Canceled)

5. (Canceled)

6. (Previously Presented) The method of claim 1 wherein event handling is performed on a client computing device.

7. (Previously Presented) The method of claim 1 wherein event handling is performed on a server computing device.

8. (Previously Presented) The method of claim 1 wherein the first event occurs before the first modification is made to the first hierarchical document.

9. (Previously Presented) The method of claim 1 wherein the first event occurs after the first modification is made to the first hierarchical document.

10. (Canceled)

11. (Canceled)

12. (Withdrawn) The method of claim 1 wherein an answer message is sent to a client that requested the first modification to the hierarchical document that caused the event handler to enforce the business rule that caused the second modification to the hierarchical document.

13. (Withdrawn) The method of claim 12 wherein a broadcast message is sent to another connected client.

14. (Withdrawn) The method of claim 1 wherein the business rule causes the second modification to the document without a corresponding request from a client.

15. (Withdrawn) The method of claim 14 wherein a broadcast message is sent to all connected clients indicating the second modification.

16. (Previously Presented) A distributed document object model system for associating business logic, comprising:

a computing device having a memory, the memory including:

a component that receives a first registration request from a first business logic event handler for a first event of the distributed document object model system, wherein:

- the first business logic event handler is registered for a hierarchical document of the distributed document object model system,
- the first business logic event handler is responsive to an occurrence of the first event of the distributed document object model system, and
- the first event occurs in response to a first modification made or requested to be made to the hierarchical document;

a component that receives a second registration request from a second business logic event handler for second event of the distributed document object model system, wherein:

- the second business logic event handler is registered for the hierarchical document of the distributed document object model system, wherein the second business logic event handler is different from the first business logic event handler;
- the second business logic event handler is responsive to an occurrence of the second event of the distributed document object model system,
- the second event is different from the first event, and
- the second event occurs in response to a second modification made or requested to be made to the hierarchical document;

a component that registers the first business logic event handler for the first event of the distributed document object model system;

a component that registers the second business logic event handler for the second event of the distributed document object model system;

- a component that monitors for an occurrence of at least one of the first and second events;
- a component that detects an occurrence of the first event;
- a component that notifies the first business logic event handler of the occurrence of the first event;
- a component that receives a first indication from the first business logic event handler; and
- a component that performs a first function relating to the received first indication, wherein the first function performed includes applying a first business rule, thereby making a third modification to the hierarchical document, wherein the third modification is different from the first and second modifications.

17. (Canceled)

18. (Previously Presented) The system of claim 16 wherein the first business logic event handler is registered for a first document type and the second business logic event handler is registered for a second document type.

19. (Canceled)

20. (Canceled)

21. (Previously Presented) The system of claim 16 wherein the computing device includes a client computing device.

22. (Previously Presented) The system of claim 16 wherein the computing device includes a server computing device.

23. (Previously Presented) The system of claim 16 wherein the first event occurs before the first modification is made to the first hierarchical document.

24. (Previously Presented) The system of claim 16 wherein the first event occurs after the first modification is made to the first hierarchical document.

25. (Canceled)

26. (Canceled)

27. (Withdrawn) The system of claim 16 wherein an answer message is sent to a client that requested the first modification to the document that caused the event handler to enforce the business rule that caused the second modification to the document.

28. (Withdrawn) The system of claim 27 wherein a broadcast message is sent to another connected client.

29. (Withdrawn) The system of claim 16 wherein the business rule causes the second modification to the document without a corresponding request from a client.

30. (Withdrawn) The system of claim 29 wherein a broadcast message is sent to all connected clients.

31. (Previously Presented) A method of handling events in a distributed object model system, the method comprising:

receiving a first registration request from a first business logic event handler for a first event of the distributed document object model system, wherein—

the first business logic event handler is registered for a hierarchical document of the distributed document object model system,
the first business logic event handler is responsive to an occurrence of the first event of the distributed document object model system, and
the first event occurs in response to a first modification made or requested to be made to the first hierarchical document;
receiving an indication of an occurrence of the first event of the distributed object model system;
providing a notification to the first business logic event handler of the occurrence of the first event;
determining if a first business rule specifying a first action to perform upon the hierarchical document is associated with the first business logic event handler;
if a first business rule specifying a first action to perform upon the hierarchical document is associated with the first business logic event handler, then performing the specified first action upon the hierarchical document;
receiving a second registration request from a second business logic event handler for a second event of the distributed document object model system, wherein—
the second business logic event handler is different from the first business logic event handler;
the second business logic event handler is responsive to an occurrence of the second event of the distributed document object model system,
and
the second event occurs in response to performance of the specified first action upon the hierarchical document;
receiving an indication of an occurrence of the second event of the distributed object model system, wherein the second event is caused by performing the specified first action upon the hierarchical document;

providing a notification to the second business logic event handler of the occurrence of the second event;
determining if a second business rule specifying a second action to perform upon the hierarchical document is associated with the second business logic event handler; and
if a second business rule specifying a second action to perform upon the hierarchical document is associated with the second business logic event handler, then performing the specified second action upon the hierarchical document.

32. (Canceled)

33. (Previously Presented) The method of claim 31, further comprising:
receiving an indication to associate the first business rule with the first business logic event handler;
associating the first business rule with the first business logic event handler;
receiving an indication to associate the second business rule with the second business logic event handler; and
associating the second business rule with the second business logic event handler.

34. (Previously Presented) The method of claim 31 wherein performing at least one of the specified first and second actions upon the hierarchical document includes modifying a node of the hierarchical document.

35. (Previously Presented) The method of claim 31 wherein at least one of the first and second events occurs when a mutation is applied to a node of the hierarchical document.

36. (Previously Presented) The method of claim 1, further comprising:
detecting an occurrence of the second event; and
in response to the occurrence of the second event:
 notifying the second business logic event handler;
 receiving a second indication from the second business logic event handler; and
 performing a second function relating to the received second indication, wherein the performed second function applies a second business rule that causes a fourth modification to the second hierarchical document, wherein the fourth modification is different from the first, second, and third modifications.

37. (Previously Presented) The system of claim 16, further comprising:
a component that detects an occurrence of the second event;
a component that notifies the second business logic event handler of the occurrence of the second event;
a component that receives a second indication from the second business logic event handler; and
a component that performs a second function relating to the received second indication, wherein the second function performed includes applying a second business rule, thereby making a fourth modification to the second hierarchical document, wherein the fourth modification is different from the first, second, and third modifications.

38. (New) The method of claim 1 wherein the first business logic event handler includes one or more criteria that are applied to events of the distributed document object model system and one or more business rules, and wherein the method further comprises:

 applying the one or more criteria to the first event;

determining that the one or more criteria are satisfied by the first event; and
in response to the determining, applying the first business rule that causes the
third modification to the first hierarchical document.

39. (New) The method of claim 1 wherein the first event is handled exclusively by the first business logic event handler and the second event is handled exclusively by the second business logic event handler.

40. (New) The method of claim 1 wherein the first business logic event handler performs the first function that applies the first business rule that causes the third modification to the first hierarchical document.